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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/866,600	05/30/2001	Kazunori Iwamoto	862.C2246	4961

5514 7590 01/07/2004

FITZPATRICK CELLA HARPER & SCINTO  
30 ROCKEFELLER PLAZA  
NEW YORK, NY 10112

EXAMINER
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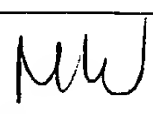
NGUYEN, HUNG

ART UNIT	PAPER NUMBER
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2851

DATE MAILED: 01/07/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/866,600	IWAMOTO ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Hung Henry V Nguyen	2851	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on RCE filed November 6, 2003.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 31-59 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 31-59 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. §§ 119 and 120**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  
a) ☒ All   b) ☐ Some \* c) ☐ None of:  
1. ☒ Certified copies of the priority documents have been received.  
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.  
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).  
\* See the attached detailed Office action for a list of the certified copies not received.
- 13) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application) since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.  
a) ☐ The translation of the foreign language provisional application has been received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121 since a specific reference was included in the first sentence of the specification or in an Application Data Sheet. 37 CFR 1.78.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                             | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____  |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)         | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input type="checkbox"/> Other: _____                                    |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on November 6, 2003 has been entered.

### ***Claim Rejections - 35 USC § 103***

2. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

3. Claims 31-54 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishida et al (JP-405217837A).

With respect to claims 31-54 Nishida (figure 2) discloses a stage apparatus which comprises substantially all of the basic features of the instant claims such as: a stage (5) movable along X and Y axes, a laser head (6)/interferometer for generating a laser beam; a first reflecting unit (11a) which are arranged on the stage for measuring the stage in a first direction (x-direction) and a second reflecting unit (11b) for measuring the stage in a second direction/Y direction. Nishida further teaches first optical units (9a) which is arranged outside the stage and splits a first laser beam for measuring a position of the stage in a first direction, into first

Art Unit: 2851

reference and measuring beams and second optical unit (9b-c) which splits a second laser beam for measuring a position of the stage in a second direction, into second reference and measuring beams and the second optical unit is arranged outside of the stage. In figure 2, Nishida does not expressly disclose the mirrors (11b) being arranged outside the stage. However, in figure 1, Nishida teaches a stage apparatus where the mirror (11b) is arranged outside the stage (5). It is the Examiner's position that in view of such teachings, it would have been obvious to one having ordinary skill in the art at the time the invention was made to combine the teachings of Figs 1 and 2 of Nishida to obtain the invention as specified in the above claims of the instant invention. It would have been obvious to a skilled artisan to arrange the second reflecting unit outside of the stage for at least the purpose of reducing the physical size and weight of the stage apparatus without being affected by the light path difference caused by the stage device movement. Furthermore, it is noted that a prior art apparatus satisfying the claimed features ( as is clearly illustrated in this case), it would have been obvious to a skilled artisan to rearrangement of parts, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

4. Claims 55-59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nishida in view of Umatabe (U.S.Pat. 5,243,377).

With respect to claims 55-59, Nishida discloses substantially all of the limitations of the instant claims as shown above except for the stage apparatus/exposure apparatus being communicated with a computer network such as LAN or Internet. However, this in itself does not provide any inventive steps. For example, Umatate et al discloses a plural exposure

Art Unit: 2851

apparatus and a host management system (H-COM), a network interface, a computer and the information relating to each of the exposure apparatuses can be communicated by a computer network (see fig.1 of Umatate et al). It would have been obvious to a skilled artisan to employ a computer network as suggested by Umatate for stage device/exposure apparatus of Nishida for remotely and automatically managing, analyzing and troubleshooting and maintenance stage device and the exposure apparatus.

***Response to Amendment/Arguments***

5. Applicant's amendment filed October 8, 2003 have been entered. Claims 1-30 have been cancelled and new claims 31-59 have been added. The Examiner has carefully considered applicant's arguments, in combination with the amendment but does not find them persuasive in overcoming the rejection of record. As discussed, Nishida meets all of the basic features of the instant claims except for the second reflecting mirror being arranged outside the stage. The applicant is reminded that the rejection here is made under 35 U.S.C. 103(a). The person having skill in the art is usually a graduate engineer. In view of Nishida's teachings, the Examiner does not find applicant's arguments convincing that placing the second reflecting mirror outside the stage would have been unobvious to such a person and when a prior art apparatus satisfying the claimed features it would have been obvious to a skilled artisan to rearrangement of parts, since it has been held that rearranging parts of an invention involves only routine skill in the art. *In re Japikse*, 86 USPQ 70.

Application/Control Number: 09/866,600

Page 5

Art Unit: 2851

6. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hung Henry V Nguyen whose telephone number is 703-305-6462. The examiner can normally be reached on Monday-Friday (First Friday off).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Russ Adams can be reached on 703-308-2847. The fax phone number for the organization where this application or proceeding is assigned is (703) 872-9306.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

hvn  
1/5/04



**HENRY HUNG NGUYEN**  
**PRIMARY EXAMINER**